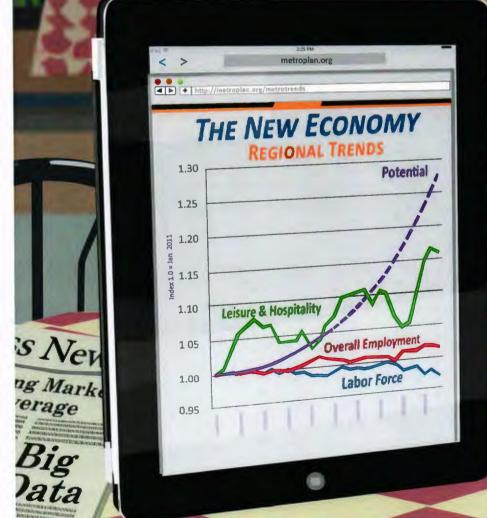
December 2014

METRO

Economic Review and Outlook

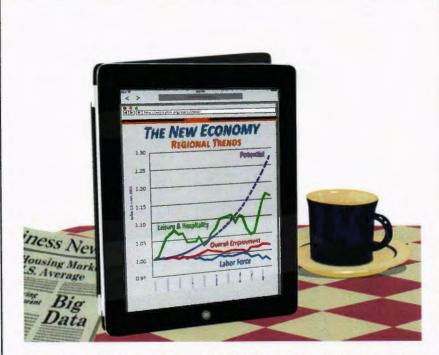
- The New Economy
- Industries in Transition
- Where are the Missing Workers?
- Understanding Big Data
- Acxiom and Central Arkansas
- Local Entrepreneurs Change the
 Game in Growing Restaurant Sector
- Manufacturing in the New Economy
- Local Housing Market Trails U.S. Average
- Construction Value Trends
- Economic Outlook 2015





METROPLAN

SMAIL PLANNING MAKES SMART PLACES



On the Cover: The Illustration weaves together the main "New Economy" findings of this year's *Economic Review and Outlook*. The restaurant background conveys this vital sector's interplay with local economy and lifestyle.

The chart in the foreground conveys several actual recent Central Arkansas economic metrics addressed within the text. The upward-sloping "potential" line conveys very real possibilities in local manufacturing, the restaurant sector, Big Data and elsewhere. Changes in lifestyle (and work-style) are disrupting and renewing both local and national economies. The Acxiom Corporation, a major global player in Big Data, is not based in Silicon Valley or Austin, but right here in Central Arkansas.

About Metroplan

Metroplan is a voluntary association of local governments that has operated by interlocal agreement since 1955. Originally formed as the Metropolitan Area Planning Commission of Pulaski County, Metroplan now has members in five counties of the six-county metro area (see below). Metroplan is the designated metropolitan planning organization (MPO) under Title 23 of the United States Code.

Metroplan serves as the regional voice on issues affecting Central Arkansas, develops transportation plans required by federal law, convenes stakeholders to deal with common environmental issues, and provides information and staff resources to our member local governments, the business community and the public. As part of that mission, Metroplan publishes Metrotrends twice yearly. The spring edition is the Demographic Review and Outlook; the fall edition is the Economic Review and Outlook.

About CARTS

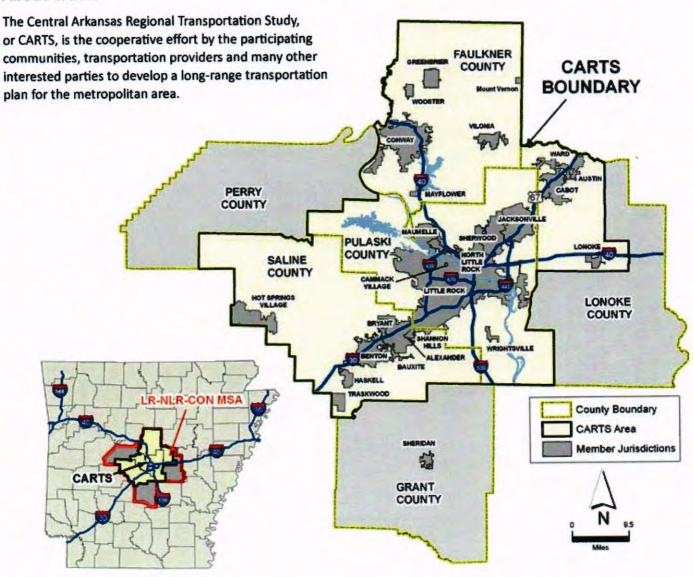


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Metroplan's Economic Review and Outlook is an annual chronicle providing economic data and insight for the Little Rock-North Little Rock-Conway MSA.

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Photographs: Lynn Bell and Jonathan Lupton except where noted

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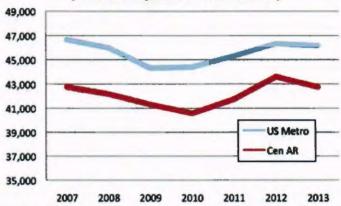
The New Economy

In October of 2013, total employment in Central Arkansas reached 350,700.¹ For the first time in six years, regional employment had notched higher than it was during its previous peak year, 2007. The economy had recovered the jobs lost during the Great Recession, albeit with different jobs.¹ We now have a new economy, with a new mix of industries, new sources of growth, and lingering aftereffects from the greatest economic slump since the Great Depression 1929-1940.

Superficially, the news is quite good. Adjusted for seasonality, local unemployment was down to 5.6 percent in August, 2014, its lowest level since December 2008, and lower than U.S. and state unemployment rates of 6.1 and 6.2 percent, respectively.

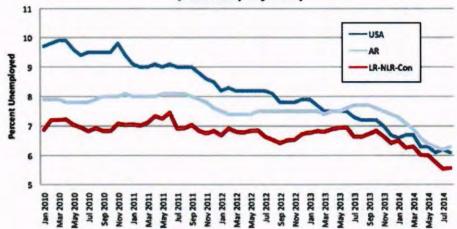
A closer look at the figures reveals difficulties, however, that suggest the new economy may have trouble delivering on its initial promise. Regional per capita income, which grew more quickly than the U.S. average 2010-2012, slumped in 2013 back to its 2007 level, after adjusting for inflation.² While regional employment is growing again, it has been growing more slowly than the U.S. average. As the chart shows, both state and local employment growth are lagging the U.S. trend.

Per Capita Income 2007–2013 (Inflation-adjusted to 2013 dollars)



Source: U.S. Bureau of Economic Analysis, inflation adjustment by Metroplan.

Monthly Unemployment Rate January 2010-August 2014 (seasonally adjusted)



Source: Arkansas Department of Workforce Services. Seasonal adjustment for LR-NLR-Con MSA by Metroplan.





Local employment data suggest that those who are looking for work, like these job fair participants, are finding jobs more quickly now.

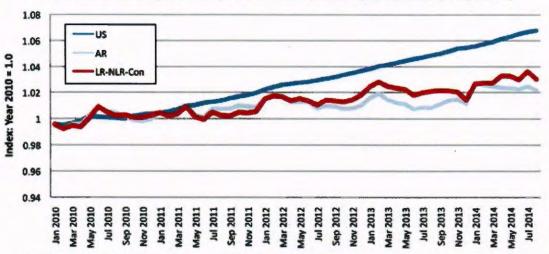
¹Figures from Arkansas Department of Workforce Services, not seasonally adjusted. ²U.S. Bureau of Economic Analysis, with inflation adjustment by Metroplan.

The New Economy (continued)

The other weakness lies in slumping labor force participation. Part of the drop in unemployment comes not from the greater number of people who are employed, but from the sizeable share of people who are no longer looking for work. This is a national problem too.

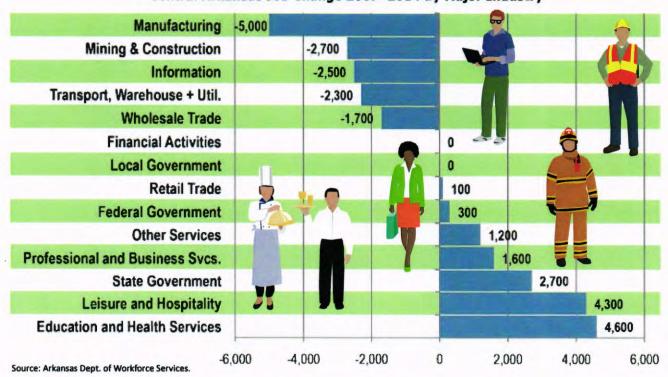
While it is clear that many economic fundamentals have changed, the exact nature of the new economy remains elusive. Where are the best growth prospects? Which sectors are in decline? Is Central Arkansas competing, or falling behind? This edition of the *Metrotrends Economic Review and Outlook* will ask these questions, aiming for a glimpse at the near-term future. M

Employment Change January 2010-2014 (Monthly, Seasonally Adjusted)



Source: Arkansas Dept. of Workforce Services. Seasonal adjustment by Metroplan.

Central Arkansas Job Change 2007-2014 by Major Industry



Industries in Transition

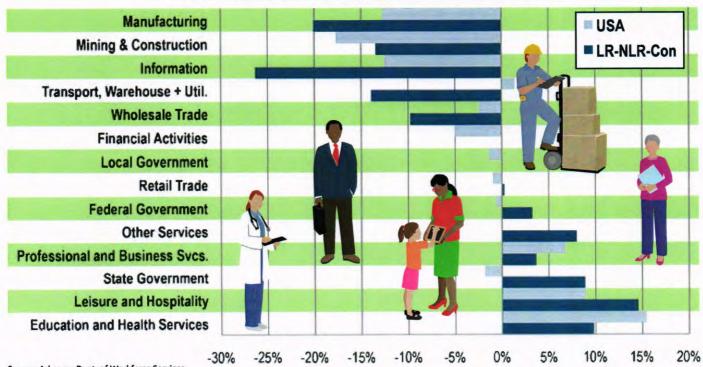
Most industries have fewer workers in the Great Recession's aftermath than they did before. The chart at bottom left shows the change by industry. As you can see, the region lost about 5,000 jobs in manufacturing over the 2007-2014 period—about 20 percent of all local manufacturing jobs. The construction, mining, transportation, warehouse and wholesale trade industries also suffered losses. Job gains were biggest in education and health services, a trend in line with the U.S. average. The region's second-biggest gain was in the leisure and hospitality sector, which includes the accomodation and food service subsectors, detailed on pages 8-9. The region's third-biggest gain was in state government employment. The region also gained jobs in professional and business services, typically a mainstay Central Arkansas industry.

The chart below compares local industry change by industry with the U.S. average. As you can see, the local area saw smaller job gains in education and health

services sector than the U.S. average, but exceeded U.S. gains in the leisure and hospitality sector. Other local stand-outs include state government employment and "other services," a miscellaneous sector that includes repair services, personal services, nonprofit and religious organizations. The local business services sector also gained, but grew more slowly than the U.S. average, a reversal of past trends.

The region's economy appears to be more service-oriented than it was prior to the Great Recession. Similar changes have occurred at the national level, but with proportionally lower losses in manufacturing and in the transportation and warehousing sectors. At the same time, the local area has made larger-than-average gains in leisure and hospitality. This may suggest a growing influx of tourists, as well as growing emphasis on recreation and entertainment by the local population. M

Percent Employment Change by Major Industry 2007-2014



Source: Arkansas Dept. of Workforce Services.

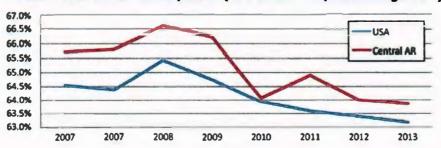
Where Are the Missing Workers?

Around the turn of the century, labor force participation—the share of people holding or looking for jobs—stopped growing. Then the Great Recession of 2008-2009 struck. Millions of workers lost their jobs, and when economic growth resumed, not all returned. It took half a decade for total jobs in U.S. and local economies to return to 2007-2008 levels. U.S. population grew 5.7 percent, while labor force grew just 1.9 percent. In Central Arkansas population grew 7.3 percent, yet labor force dropped 1.9 percent. Our lower-than-average unemployment, a positive metric, results partly from a negative indicator—labor force decline.

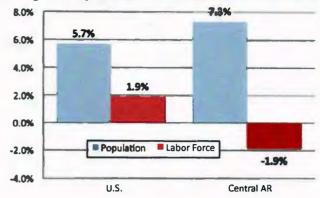
The chart below shows labor force participation decline 2007-2013. Local labor force participation is marginally higher than the U.S. average, but both have declined despite economic recovery.² There's not a lot of information about people who have dropped off the labor rolls. Baby Boom retirements are a factor, but are often over-stated, especially at the local level. Census 2010 showed the local area with a smaller share of workers in their near-retirement 50s and lower 60s than the U.S. average, and a higher share of people in younger categories, especially the 25–30 crowd.

Why have so many people dropped out? Some rode out hard times by attending (or staying in) school instead of working. The share of persons on disability has risen, accounting for some of the missing labor force.³ More people are making do with less, often leaning on family members. Data on local married-couple families show the share with both partners in the labor force dropped in recent years.⁴ By comparison, as the chart at right shows, the share with neither partner in the labor force has increased. The local share of couples with only the

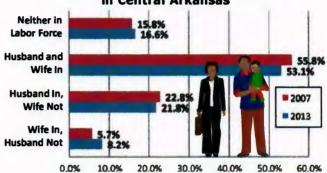
Civilian Labor Force Participation (as Share of Population Age 16+)



Change in Population and Labor Force 2007-2014



Labor Force Participation for Married Couples in Central Arkansas



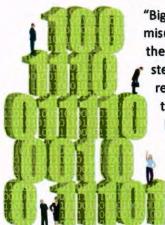
wife in the labor force grew fairly sharply, from 5.7 percent in 2007 to 8.2 percent in 2013. The share with just the husband in the labor force has declined—male labor force participation has taken the biggest hit in recent years.

Economists speak of the "opportunity cost of unemployment," the burden of taking a job versus forgone income. For many, rejoining the workforce may offer little. Demand for tech-savvy and/or "creative class" workers

is high, but for less skilled workers the prospect is tougher and less lucrative. The longer workers stay out of the job market, the harder it is to return. The whole economy pays through lost production of goods and services. Many "labor force dropouts" have found lean but adequate ways to get by, and do not perceive the job market offering enough to lure them back.

¹Data from U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, and Metroplan population estimates. ²U.S. Bureau of the Census, American Community Survey. ³"The Missing Millions," Economist September 28, 2013. ⁴The chart gives Central Arkansas ACS data. U.S. figures are broadly similar.

Understanding Big Data



"Big data" is a term, sometimes misunderstood, which refers to the next imagination-stretching step in the digital revolution. It represents an exponential trend that is changing the game in business, government, and personal lives, yielding great opportunities and some serious risks.1

> In the past, analysts used sampling to deal with large volumes of data. Thanks to

a sensational drop in computing and data storage costs, we can instead grapple with entire gigantic data sets, yielding greater accuracy. Credit card fraud, for example, leaves subtle patterns that can be blurred by sampling, but picked up through big data. Big data firms can identify epidemics from Internet chatter before they are identified by the U.S. Centers for Disease Control.2

Big data typically analyzes correlation, not causation. This seems counter-intuitive, but the results can be astounding. For example, from the 1950s through the 1990s, experts

tried to teach computers to translate between languages by using causation-based thinking. The algorithms they developed, based on language rules, were hindered by the complexity and variations in all languages, and success was minimal. Then, in 2006, Google instead took a big data correlation-based approach to the problem, feeding in nothing less than the entire global Internet. By 2012 Google could convert voice inputs from 14 different languages into workable (still imperfect) translations. Similar data inputs now allow computers to beat humans at chess, and it is voluminous data (more than machine reasoning) that makes Google's self-driving car a serious possibility in the not-too-distant future.

Much useful information can be gleaned from "data exhaust" — leftover byproducts. For example, Air Sage uses cell phone data to track car trips and traffic trends. In a similar way, Mastercard makes money not from interest payments, but from the data revealed by credit card purchases.

Big Data is teaching cars to drive themselves.

Doing Business in a Big Data Economy

The future will favor those who can exploit data to maximum advantage. Many corporations have found it difficult to quantify the dollar value of their own data, and

¹Mayer-Schonberger and Cukier, Big Data: A Revolution That Will Transform How We Live, Work and Think. Houghton Mifflin Harcourt, 2013. Recommended reading. 2As an example, Google warned about H1N1 flu in 2009 before the epidemic was officially identified. The CDC, by comparison, was delayed by the need to confirm test results.

Big Data Danger

Many people think their own privacy is hidden by the oceanic vastness of global data. Think again. Data can be intersected to yield microscopic results - quickly. In an August 2006 story on privacy in the modern world, the New York Times identified the name, address, and multiple personal details of a 62-year-old woman in Georgia from a simple user number. "Notice and consent" blurbs make the customer liable for his/her data revealed during online activity. These have become so ubiquitous, and unavoidable, that the only real way to protect the public from privacy abuse is to switch the legal burden to datamining firms instead.

Leaders at locally-based Acxiom understand that technology moves faster than the law. The use of data, therefore, isn't just about legality, it's also a matter of ethics, of anticipating problems in advance. Acxiom strives to lead the industry in addressing privacy issues. In September 2013, it launched a new web site, Aboutthedata.com, which allows anybody to look at the company's records about him/ herself, and how the records are obtained. To date, the site has received 760,030 hits. You can even opt out of Acxiom's targeted marketing, although in practice few web site visitors do so.

In the end, big data is an unavoidable reality of modern life. It will require legal changes not fundamentally different from the advent of copyright and libel laws following invention of the printing press circa 1450. The dangers of big data can be best avoided, and its benefits best used, if it is understood as a tool that remains subject to human judgment and intuition.

Understanding Big Data (continued)

have unloaded it at fire-sale prices. When Amazon offered AOL a bargain deal to run its user interface, it snatched AOL's customer data as part of the trade. Amazon used this treasure trove of consumption information to help catapult itself from an online bookstore into today's retail giant.

Business models must adapt to the big data world. Jet engine manufacturer Rolls-Royce gives an example. Its engineers used monitors on in-service jet engines to determine the timing for maintenance and parts replacements. Then the company realized that by predicting maintenance needs it could sell a long-term servicing package with each engine. This not only converts stored know-how into a new revenue source; it enables Rolls-Royce to continually improve engine designs from the feedback data.

The dilemma of defining information's value helps explain some uncertainties in today's economy. Much corporate value consists of "intangible assets," data and expertise with using it. This helps to partly explain stock market volatility, including the wide gaps often found in companies' price-to-earnings ratios.

One of today's hot job titles is "data scientist," but the fluid nature of information technology suggests many of the best ideas come not from defined experts,



Paying for goods with a cell phone is just one of many technological changes remaking our economy and way of life.

but from outsiders. The best skills for a big-data economy are mental versatility, the ability to spot findings in data patterns, and some basic knowledge of math, computers, and network science. Visualization can help humans understand Big Data, and Central Arkansas is developing trend-setting techniques for doing just that (See "Emerging Analytics," below). Just as important, Central Arkansas is home for one of the world's Big Data leaders, the Acxiom Corporation. M

Emerging Analytics

With today's oceanic data sets, the ability of humans to turn data into meaningful, practical insights matters more than ever. The Emerging Analytics Center (EAC) at the University of Arkansas at Little Rock (UALR) brings human data cognition into focus, mainly through visualization. The EAC houses a complete suite of data visualization technology, including a CAVE immersive visualization system and other technologies covering the entire visualization spectrum, all available for EAC

and its partners.¹ These complex, futuristic gizmos allow many capabilities ranging from enhanced spinal surgery to easier grasp of complex data sets.

EAC is today directed by Dr. Carolina Cruz
Neira, who invented the CAVE as a graduate
student (aided by several professors) at the
University of Illinois at Chicago. Under her
leadership, EAC partners with local companies
and governments, helping them improve
design concepts and gain insights not always
evident in two dimensions. The center works
with undergraduates and graduate students,

recruited heavily from in-state secondary schools and colleges. A major aim is to expose youngsters to exciting opportunities in the field of emerging analytics.

The principle behind immersive visualization is that, even with a small data set, there may be insights and meanings you miss at first sight on conventional desktop-based platforms. With CAVE and EAC's other technologies, you can literally walk into a product you are designing, as executives from

Falcon Jet did when designing a new aircraft hangar. EAC looks at data visualization holistically, both as a whole and through its details. Some of EAC's biggest opportunities lie with mid-sized companies which lack their own "tech" departments, and need help with the latest analytical technologies. If you're a student, company or agency looking for opportunities in a data-dense economy, EAC can be a helpful partner.



Dr. Yassine Belkhouche, Chief Data Scientist in the UALR Emerging Analytics Center, demonstrates the CAVE™, with a projected spinal image that looks very real.

In addition to the CAVE, EAC has a 25-foot diameter stereoscopic dome, two Oculus Rift helmets, two Virtuix Omni treadmills, several auto-stereo tablets and mobile devices, and multiple ground and air drones.

Acxiom and Central Arkansas

When you ask Acxiom corporate spokesman and Executive Vice President Jerry Jones about Big Data, he responds: "Acxiom didn't invent the term 'Big Data,' but we should have." From humble beginnings in Conway, Arkansas in 1969, Acxiom has become a billion-dollar international corporate player.

Since Acxiom doesn't produce ordinary goods and services for consumers, the company can seem mysterious. Acxiom works with other companies, and is bound by client-confidentiality needs, turning raw data into information, insight, and even wisdom. Part of Acxiom's unique expertise is its ability to overcome computers' inherent limitations, particularly their difficulty with recognizing links and context.

No company, big or small, can afford marketing to everybody. Acxiom helps companies overcome the "annoyance factor" caused by unwanted junk mail, TV ads, and telemarketing calls. Acxiom deals with corporate multinationals as well as small businesses. Its big thrust today is with online digital publishing. During 2014 Acxiom purchased LiveRamp to augment its expertise. Digital publications are gaining market share against traditional paper journals and newspapers. Acxiom aims to become the "connective tissue" between digital publishers and marketers. Advertising is often derided, but Jerry Jones points to it as "the best cross-subsidy to free speech ever invented."

Today, you can access and exchange for Acxiom's information across the globe, but this is just the beginning. While the "abstract Internet" has attained a certain degree of maturity, the "Internet of things" is just arriving. Cheap sensing devices will allow more of our world to be digitized, from cars and aircraft to offices and human bodies. Patterns can be followed, analyzed, and improved. Think of a refrigerator which can provide an automatic grocery list, sending out requests for milk, produce and frozen dinners before they run out. Looking farther up the supply chain, you can see farms, factories and stores more closely linked to homes and consumers,

paring waste and reducing costs. A fresh injection of efficiency will ripple through the economy. Acxiom will be part of these disruptive, fascinating, and promising changes, based right here in Central Arkansas.

Acxiom's Home Base

The Acxiom Corporation employs 4,535 employees around the globe. In addition to Conway and Little Rock, it has U.S. facilities in Austin, Silicon Valley, New York, Nashville, and Chicago. Overseas, it has offices in China, the United Kingdom, France, Germany, the Netherlands, Poland, Australia, and Brazil. Inside Central Arkansas, Acxiom employs 2,281 employees, about half its global workforce. "We won't ever move out of Arkansas," Jerry

Jones says. "It's where we feel nurtured, and appreciated." Acxiom has ties with the University of Arkansas system, and works with local universities to nurture relevant workforce skills. The Emerging Analytics Center at UALR is one of its closest partners.

In 1998, Acxiom began building its current corporate headquarters in Little Rock's River Market District. It would have been cheaper to build on Chenal Parkway, where land was less expensive, allowing



cheap surface parking. The downtown location required building a parking deck, but has paid back big dividends. Employees can clear their heads, recreate, and maybe even think up the next great idea walking or running on miles of vista-studded trails. Visitors are often surprised by the district's urbane quality, with multiple restaurant choices and tourist destinations in easy walking distance. Urban design has not caused Acxiom's success, but it has helped.

Local Entrepreneurs Change the Game in Growing Restaurant Sector

One of the local industries that has grown in defiance of a slow regional economy in Central Arkansas is NAICS sector 72, "accommodation and food service."1 This includes the restaurant industry. We looked for insights by meeting Scott McGehee, who with several business partners has turned his passion for cooking into a dynamic and growing local business that employs about 480 workers.

Scott came back to Arkansas in 1998 after a stint studying cooking in California. First he helped out at his Dad's business, Juanita's. In 1999 he set up his first business, Boulevard Bread (which he later sold). Working with a group of business partners titled Yellow Rocket Concepts, he started ZaZa's, an Italian restaurant, then

Local Lime and Big Orange, which today owns several restaurants in Little Rock and Conway. The group has purchased Browning's Mexican restaurant in the Heights, and plans to reopen it in a scaled-up, more cosmopolitan format. Working with another group of partners,² Scott is developing a brewery in a neglected warehouse district and looking to expand beyond the local area, possibly into Northwest Arkansas.

Hard times hit the restaurant industry in 2008, but Scott quickly recognized a new pattern. People were dining out less often, but they still wanted top-quality food. Gourmet cuisine has become trendy; even people living in small Arkansas towns will drive into Little Rock and Conway for a high-quality meal.

Scott turned economic hard times into a pathway to



Scott McGehee at Big Orange in Midtown.

"I can buy a locallygrown heirloom tomato for \$1.50 lb or I can buy an heirloom tomato from California for \$5.00 lb."

success by keeping his eye on the cost factor. Gourmet food requires top-quality natural ingredients, but does not have to be expensive. Scott keeps an eye out for fresh produce, which he still enjoys picking out personally for his restaurants. Arkansas farmers' markets have diversified their fare in recent years, providing an array of items that appeal to sophisticated tastes.

There's a human aspect to keeping costs down, too. A positive work atmosphere

reduces turnover; Scott believes happy employees work twice as hard, and take better care of customers. Scott admits his approach runs against tradition in an industry sometimes known for harsh kitchen manners, but relentlessly makes clear to managers and employees "we treat everybody with dignity and

respect." Taken together, Scott and his partners have combined a zeal for cuisine, a close eye on cost, and wise and cost-effective human relations management into a savory recipe for success.

Finding (and Saving) the Lost Forty

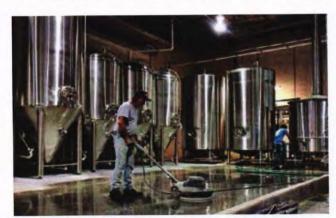
Visit the newest project of Scott McGee and his business partner John Beachboard, and you will notice a striking contrast between shining modern brewing equipment and rustic wooden fixtures reminiscent of an after-work joint for lumberjacks. In addition to developing a brewery, they plan to simultaneously jump-start a neglected warehouse district, produce and export a locally-made beer, and help conserve a patch of old-growth forest. When you ask how they

¹A sub-set of the NAICS Leisure and Hospitality sector
²These partners are John Beachboard, Russ McDonough, and Albert Brsunfisch.

expect to make this business proposition work, and why they are so confident, Scott's reply contains a trenchant comparison: "Craft beer is an exploding market. Tulsa has thirty breweries. Little Rock currently has three." Brew-master Omar Castrellon is developing beer recipes to raise Little Rock's profile in the fast-growing brewery business. People aren't drinking more these days; instead, they are demanding higher quality in the beer they consume.

The newest creation, the Lost Forty Brewery, will be a restaurant, night club and local manufacturer all in one. Diners will savor their meals and drinks while watching the brewery in operation through the glass - sort of a "Willy Wonka" dining-out experience. With other, smaller breweries planning to build in the same locale, Scott expects the area, near the Heifer Project building at McLean and Capitol just east of I-30, to soon sprout loft apartments and nightlife, as well as a manufacturing enterprise.

Many years ago, John Beachboard's family became partners to a little secret in Calhoun County, a patch of woods near their land known as "the lost forty." Long ago, as loggers cut trees in this corner of southeast Arkansas, they missed one forty-acre tract through a surveying error. The error was quietly discovered



Workers prepare for the brewery's December opening.* Photos courtesy of Lost Forty.









Lost Forty coasters and hearty bread from the test kitchen. Photos courtesy of Lost Forty.

but, as the years went by, it became an open secret that there was a patch of old-growth forest deep in the woods, and a gentle conspiracy helped keep it that way.

The business partnership thinks they have found a way to preserve the land in its original condition. The Lost Forty Brewery will partner with the Arkansas Natural Heritage Commission to develop and fund a foundation aimed at preserving the Lost Forty acreage. The forest includes ancient pines and hardwoods, with a diversity of species no second-growth forest can match. Scott and his partners are pioneering a New Economy business that can profitably bridge the natural past with a more conservation-minded future. M



Arkansas artists Caleb Pritchett (designer and wood carver) and his wife Christie Turk (letter press artist) created the artwork for the beer labels, hand-carving and printing the images. *Photo courtesy of Lost Forty*.

Note: Lost Forty opened as this publication was going to press.

Manufacturing in the New Economy

The crash of 2008 revealed an excess of financial speculation in the U.S. economy. In the recovery that followed, a new emphasis emerged on producing items of real, tangible value. U.S. manufacturing employment temporarily reversed 35 years of decline, and started slowly growing again. Today's manufacturing is much different from the semi-skilled, mass production work of past decades. There is more emphasis on research and development, and 30 percent of manufacturing jobs are in higher-paying STEM (scientific, technological, engineering and math) fields. Many U.S. cities and metro areas have begun re-emphasizing manufacturing because jobs in this sector pay better than the average service-sector job. Many of the STEM jobs in manufacturing do not require a full four-year degree, yet offer decent pay prospects. The need for such jobs has become more acute, since many previously-secure service jobs in middle-income and middle-skill ranges are being replaced by software and information technologies.

Manufacturing in Central Arkansas has yet to see such a resurgence. While the region has footholds in several key niches, like aerospace, cosmetics, wind turbines and precision equipment, local industrial activity has continued declining. As the chart at right shows, U.S. manufacturing's

share of GDP barely changed from 2007 (just before the Great Recession's onset) to 2013. By comparison, Central Arkansas manufacturing has dropped from 7.2 percent to 6.3 percent of GDP over the same period.

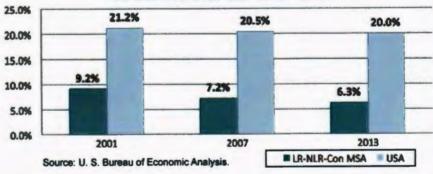
The past does not have to define the future. There are opportunities for entrepreneurs and communities willing to embrace changes that are remaking the U.S. manufacturing sector. First among these is the rise of the so-called "Maker Movement," in which aspiring inventors collaborate through community-provided software, research and 3-D printing facilities. The key is to shorten the time between inspiration and product output, and success has more to do with creativity and STEM knowledge than the

local resource base or labor costs. Local initiatives like the Argenta Innovation Center are aiming to nurture and amplify local entrepreneurial talent.¹

Innovative manufacturing occupies a territory betterdefined as PDR (production, distribution, repair) than by the traditional industrial classification defined by NAICS codes. Repair services are typically defined as "service sector" by NAICS, yet the actual line between repair and manufacturing is blurry. Distribution is often classified within transportation and warehousing, yet serves to extend manufacturing capability through the vital (and accelerating) link between producer and customer.²

The slowness of economic recovery in the Central Arkansas economy may owe something to weakness in manufacturing. Yet the region holds several key advantages. These include a central position within the state's road, rail and water transportation networks, a comparative abundance of developable land, and the presence of workforce education programs in local colleges. There may be a need for a more coordinated regional industrial strategy, but local manufacturing decline is far from inevitable.

Manufacturing GDP as Share of total GDP 2001-2013





Finished wind turbine blades await shipment at LM Windpower.

¹See last year's edition, the 2013 Metrotrends Economic Review and Outlook.

²Background on recent industrial trends is from "Sustainable Urban Industrial Development," PAS Report 577, American Planning Association, October 2014.

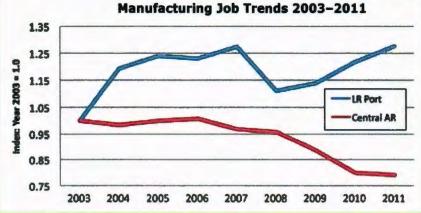
Little Rock Port Authority

The term "Little Rock Port" may sound odd to outsiders, but Little Rock hosts a river dock and slackwater harbor that allows economical barge freight transportation to sites across the country's mid-section west of the Appalachians along both sides of the Mighty Mississippi, and stretching west to Tulsa, Oklahoma. The port also hosts a short-line railroad connecting to the Union Pacific and BNSF railroads, and is just south of I-440, a generally low-congestion six-lane facility connecting conveniently to I-40, one of the country's predominant east-west freeways.

The Port Authority of Little Rock has built a track record of success in a tough manufacturing market. The Little Rock Port's industrial partners have created over 3,000 jobs (and more by some accounts). The Port has seen manufacturing employment rise 28 percent from 2003 to 2011, defying a general regional decline in manufacturing jobs. The chart below uses a jobs index to show how the port weathered recessionary times, and by 2011 had pushed manufacturing employment to new levels. The port now hosts 53 firms and agencies, including Delta Plastics, Entergy Arkansas, Interstate Signways, LM Windpower, Lexicon, Ryerson Steel, Sage V Foods, and Welspun Pipes. "We're building things again," the port's executive director Bryan Day says of U.S. manufacturing trends, and "if you're looking to manufacture something, Little Rock is very competitive." M



Ease of transportation by multiple modes is one of the Little Rock Port's strongest advantages.



Source: U. S. Bureau of the Census, LEHD. Index by Metroplan.



Scrap metal becomes an asset at Schiabo Larovo. Below: Barge transportation offers a big cost advantage over rail and truck transport (photo: Army Corps of Engineers).







Local Housing Market Trails U.S. Average

Overall regional housing construction continued a slow decline during the first half of 2014. The chart at top right compares construction in the first half of each year (January-June) 2004-2014. As you can see, single-family housing dropped nearly 20 percent from 2013 levels. Multi-family housing gained a bit, up 21 percent from the same January-June interval last year. As a whole, regional housing construction remains slow.

In single-family housing, most cities in the region were down with the sole exception of Jacksonville. Little Rock held nearly even, as did Sherwood and Hot Springs Village. The region's two leading builders of single-family homes in early 2014 were Little Rock and Benton. Bryant, Cabot and Conway, previously among the region's fastest-growing housing construction markets, saw less construction January-June of 2014. In multi-family construction, the only significant players in early 2014 were Little Rock and Conway. With 469 units under construction, Little Rock accounted for 86 percent of multi-family construction in the region, the vast majority. Conway held second place, with one 51-unit complex and a handful of duplexes.

For several years now. Metroplan has been using an index to compare local housing permit trends with the U.S. average. This year, in line with the "new economy" theme, we revised the index, using the year 2010 as the new base.1 The chart at middle right compares local and U.S. single-family housing, adjusted for seasonality, from the first quarter of 2010 through the third quarter of 2014. It reflects the recovery following the Great Recession. As you can see at bottom right, permits for new single-family units in Central Arkansas ran in line with U.S. average through



Benton ranks second-highest in the region for new single-family housing construction, as seen here at the Hickory Heights subdivision.

the end of 2012. From that point onward, they have gone in separate directions. U.S. single-family housing, while still running well below pre-crash levels, has slowly gained ground, reaching an index value of 1.4 in the third quarter of 2014. By comparison, local single-family housing had slumped to 0.69, or 69 percent the average from the year

Half Year (January-June) **Housing Unit Permits 2010–2014**

Single-Family

	2010	2011	2012	2013	2014
Benton	129	78	101	117	96
Bryant	109	73	69	64	32
Cabot	45	45	48	65	28
Conway	137	82	86	76	62
Hot Sprgs Vill	40	26	28	25	22
Jacksonville	33	16	15	15	20
Little Rock	183	180	168	188	186
Maumelle	50	34	41	41	31
N Little Rock	74	80	87	55	31
Sherwood	61	54	69	73	70

Multi-Family

	2010	2011	2012	2013	2014
Benton	0	0	0	0	0
Bryant	450	22	26	0	0
Cabot	36	0	0	0	0
Conway	318	0	40	94	61
Hot Sprgs Vill	0	0	0	0	0
Jacksonville	6	0	6	0	12
Little Rock	126	514	207	259	469
Maumelle	0	0	0	0	0
N Little Rock	98	312	0	96	2
Sherwood	0	0	0	0	0

Regional Totals

	2010	2011	2012	2013	2014
Total SF	821	642	684	694	556
Total MF	1,034	848	279	449	544
Grand Total	1,855	1,490	963	1,143	1,100

¹The previous index was the year 2004.

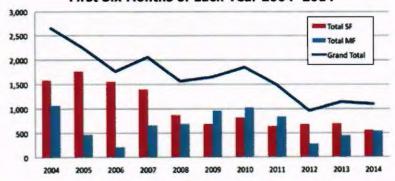
For multi-family housing, the new index is also based on the year 2010. To avoid sharp seasonal variations, the figures are conveyed in annual increments. The figure for 2014 is preliminary. As you can see, the region has seen a decline in multi-family construction, even as U.S. multi-family construction has more than doubled since 2010.

Housing construction is slowly rebounding at the national level. Changing demographics and transformed financial markets make it likely that multi-family and rental housing will be a bigger part of the mix than in the decades of post-World War II suburban growth. For the local area, multi-family is accounting for a larger share of the total, too. But local housing markets have been slow for several years now, suggesting population growth may be slowing. M

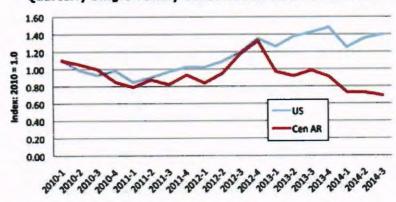


This artist's rendering shows the proposed South Village Apartments at Quapaw in downtown Little Rock. Construction started recently on the apartment complex at 1301 Louisiana St. (Photo by South Village Apartments at Quapaw)

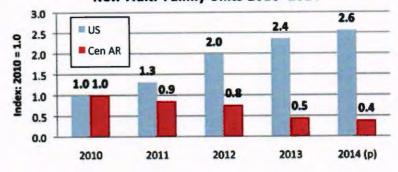
LR-NLR-Conway Housing Unit Permits First Six Months of Each Year 2004–2014



Ouarterly Single-Family Construction Trend 2010-2014



New Multi-Family Units 2010-2014



Socioeconomic Statistics 2013-2014

	LR-NLR-Conway MSA	Faulkner	Grant	Lonoke	Perry	Pulaski	Saline
Average Res. Employment 2014	317,775	54,225	7,625	30,250	4,150	171,925	49,600
% Unemployment	6.7%	7.0%	6.7%	6.3%	8.8%	6.9%	6.1%
New Industries 2013-14**	3	0	0	0	0	3	0
Expanding Industries 2013-14**	10	1	1	0	0	8	0
Bank Deposits 2014 (\$ 1,000)*	\$11,790,428	\$5,607,845	\$98,178	\$439,256		\$5,476,926	\$168,223
Bank Assets 2014 (\$ 1,000)*	\$14,794,765	\$7,070,295	\$115,234	\$508,983		\$6,897,226	\$203,027

Sources: Arkansas Department of Workforce Services, Arkansas Economic Development Commission, and FDIC. Rounding may cause some unemployment rates to differ slightly from DWS data.

*Bank data exclude assets and deposits held by banks serving the area but based outside the Little Rock-NLR-Conway MSA. Bank deposit and asset data represent March 30, 2014.

**New and Expanded industries as announced by the Arkansas Economic Development Commission, over period October, 2013 through September, 2014.

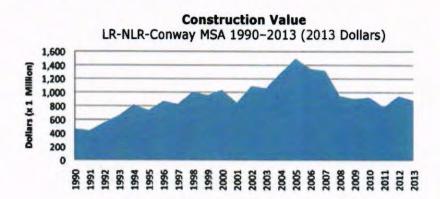
Construction Value Trends

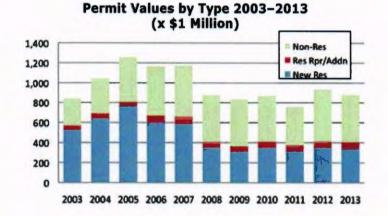
Regional construction remains in slowgrowth mode. As the chart at right shows, regional construction in 2013 was \$883 million, barely above its recent trough in 2011, and down 7 percent from 2012.1 Nonresidential construction remains the stronger portion of the market. at \$477 million in 2013. Construction of new residential units (single-family and multi-family) constituted just \$338 million in 2013, about 38 percent of total construction. During the housing boom in 2003, by comparison, new residential construction accounted for 61 percent of the total. At the same time, it appears that homeowners are putting more emphasis on repairs and upgrades, which have increased from 3.6 percent in 2003 to 7.7 percent in 2013.

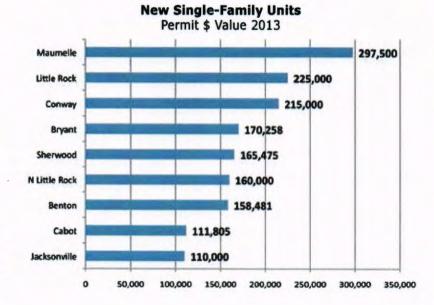
The share of construction by county has also changed sharply in recent years. All counties saw less construction value in 2013 than they did in 2003, but the share of total construction has shifted back toward the center. While Pulaski County accounted for 63 percent of total values in 2003, its share had climbed to 76 percent in 2013. Lonoke County saw the biggest decline, from 6–8 percent of regional construction in the 2003–2005 years, down to 2.3 percent in 2013.



Square-footage values are high for new homes in Conway's Hendrix Village.





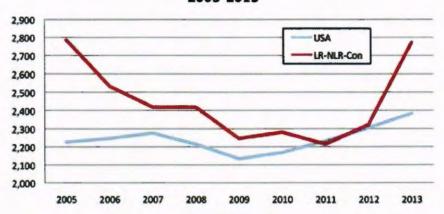


¹ Figures are adjusted for inflation (2013 dollars)

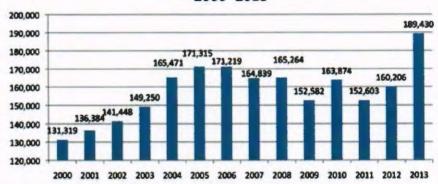
² The square footage measure is derived from the region's three largest cities only: Conway, Uttle Rock, and North Little Rock. U.S. figures from U.S. Bureau of the Census.

The figures for single-family housing suggest a smaller and very different kind of new-home market in recent years. While the total number of single-family homes under construction is running at less than half its 2003-2007 level, the median value of new homes has shot up to \$189,430 in 2013. Median square footage, which declined 2005-2011 and rose only modestly in 2012, reached 2,772 square feet in 2013.2 In today's economy, the majority of newly-built homes are larger and more expensive than in previous years. Since regional average income has grown only slowly since the Great Recession and total units under construction is slow, it appears the new home construction market is at present serving mainly high-income households. For people in more moderate and lower income ranges, resale homes and rental markets seem to be meeting the majority of housing demand. M

Median Square Footage of New Single-Family Homes 2005-2013



LR-NLR-Conway Median New Home Permit Value 2000–2013





LIV Riverdale will add 261 units to Little Rock's Riverdale neighborhood. Below: The Village at Hurricane Creek will add a Kroger grocery store and several new retailers in Benton.





An older home was demolished to make way for this new home in North Little Rock's Lakewood neighborhood.

Economic Outlook 2015

The region's leading indicators depict a continuing regional recovery, albeit a slow one thus far. The primary sign of recovery is dropping unemployment, down to just 5.3 percent in September, 2014. With unemployment barely above 5 percent and still trending downward, low- and mid-range job openings may face worker shortages, albeit less severe than the shortage of workers with specialized skills that remained a challenge for employers even amid the worst economic conditions 2009-2011. The hopeful trend in unemployment nonetheless conceals continuing weakness (locally and nationally) in labor force participation. Many people who might have held jobs in previous economic conditions have adapted the means —however sparse—to live without working. This hinders potential economic growth.

Overall job growth nonetheless remains solid, albeit presently below the national average. Trends in housing markets suggest regional population growth has slowed, possibly a by-product of the tepid (so far) local economic recovery. Specifically, housing markets were soft during 2013 and into 2014. The most recent American Community Survey (ACS) data show rising vacancy, particularly in rental housing, while at the same time household size has continued rising too. This suggests fewer new households are forming, and that some existing households are "doubling up." Some of this trend may be a byproduct of diminished labor force participation.

This edition explored the economic order emerging half a decade after the Great Recession's onset. The shape of the emerging economy remains elusive, but a few realities are apparent.

The downside is undoubtedly the continuing growth in economic and social disparities, to which the local region is not immune. Part of the weakness in housing demand owes to a lack of income growth among many regional residents. Some suburban communities, long accustomed to receiving in-migration of high-income populations, are seeing an increase in poverty as less well-off persons seek affordability in suburban housing markets transformed after the housing bubble of the mid-2000s burst.

The possibility of a new national single-family housing bubble is very real, although the local region's traditional advantage in housing affordability, and the slowness of its housing markets at present, means any national market shocks will be muted in Central Arkansas. Local governments that best manage the cost factors of land and infrastructure development, providing high-quality services while avoiding financial over-extension, will be best-positioned to meet future challenges. Urban and suburban in-fill projects can be more cost-effective than greenfield development, but only if zoning and regulatory constraints to urban redevelopment can be overcome.

An example of changing measurements is provided by the locally vibrant restaurant-and-brewing sector, which looks like a tertiary "service" industry at first sight. As the articles on pp. 8–9 showed, however, the local restaurant sector is developing export products, and has every prospect of seeding a walkable mixed-use urban district east of I-30 in Little Rock providing the region's newest injection of urban dynamism. Even in the region's heavily predominant lower-density car-dependent environments, a dynamic restaurant

New Questions Demand New Measurements

Some of the confusion about contemporary trends owes to our means of measurement. Employment, unemployment, and labor force participation statistics, as well as the NAICS codes for industry classification, were devised in earlier times, and fail to convey important parts of the economic picture. A crucial question in today's economy is: which elements of lifestyle (and work-style) yield discouragement and non-participation? Which ones spur catharsis and innovation? Greater insight could profitably unleash hidden human potential. Big Data opens opportunities for measurement and research in questions like these which have barely been explored.

sector can provide a sense of local experience and regional uniqueness that attracts visitors and bestows meaningful jobs, laying the groundwork for further innovation and growth.

A recent surge in shopping center construction across the region will pose a challenge to existing retail centers, because e-commerce continues growing while store sales remain flat overall. Individual projects in Conway, Benton and elsewhere may thrive due to location advantages, or by carving out new specialty "destination retail" niches as the Outlet Mall in southwest Little Rock may achieve. The prospect for the rest of regional retail will be more fiercely competitive than ever.

The regional slowdown cited in this report is probably temporary. For example, while vacancy among some housing units has visibly risen, whispers from multifamily developers suggest as many as 1,700 new units may be built in Pulaski County within about a year. Many units will be high-quality housing aimed at upwardly-mobile members of the Millennial Generation, which has less interest in home ownership than older groups. At the same time, low costs and the unusual (for its size) economic diversity of Central Arkansas provide career and entrepreneurial opportunities that give the region potential for a new wave of prosperity as the post-recession economy matures. M



Little Rock's new Bass Pro Shop aims to carve a niche within the competitive bricks-and-mortar retail sector.



Moving dirt for 168 new apartments near the intersection of Kanis and Cooper Orbit Roads. Several hundred more units may soon go in nearby.

New and Expanded Industries October 2013-September 2014

Major Category	NAICS	New	Company	City	County	Product or Service
31 - 33 Manufacturing	321300	0	Ring Container Technologies LLC	Little Rock	Pulaski	plastic containers
	325211	0	Ashland, Inc.	Jacksonville	Pulaski	composite polyester resin
	325620	0	L'Oreal USA Products, Inc.	North Little Rock	Pulaski	cosmetics
	325998	6	Imbicor	Maumelle	Pulaski	super absorbent polymer
	331311	25	Porocel Industries LLC	Little Rock	Pulaski	activated aluminas, bed supports and catalysts
	332510	8	Galley Support Innovations	Sherwood	Pulaski	aircraft interior hardware
	332913	0	Kohler Company	Sheridan	Grant	plumbing faucets, fittings and toilette seats
	333195	2	Snap-On Equipment, Inc.	Conway	Faulkner	automotive wheel alignment equipment
	336411	420	Dassault Falcon Jet	Little Rock	Pulaski	aircraft
54 Prof / Business Svcs	541511	16	Delaware Resource Group of Oklahoma	Sherwood	Pulaski	courseware design
	541511	35	nGageLabs, Inc.*	Little Rock	Pulaski	custom computer programming services
55 Management of Companies	551114	35	Advanced Cabling Systems	North Little Rock	Pulaski	regional corporate headquarters
56 Administrative/Waste Svcs	56142	221	TeleTech Services Corporation*	Sherwood	Pulaski	call center

^{*} NAICS assignment by Metroplan.

Source: Arkansas Economic Development Commission.

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